

DEPARTMENT OF BCA

COURSE OUTCOMES

SEMESTER - I

COMPUTER FUNDAMENTALS AND OFFICE TOOLS

CO#	Course Outcome
C01	Describe the usage of computers and why computers are essential components in business and society.
C02	Identify categories of programs, system software and applications. Organ and work with files and folders.
C03	Compose, format and edit a word document and working with macros.
C04	Create work sheets and using various functions.
C05	Make presentations and inserting multimedia in them.

PROGRAMMING IN 'C'

CO#	Course Outcome
C01	Understand the basic terminology used in computer programming.
C02	Write, compile and debug programs in C language.
C03	Use different data types in a computer program.
C04	Design programs involving decision structures, loops and functions.
C05	Understand the dynamics of memory by the use of pointers and Structures.
C06	Apply different operations in File handling.

NUMERICAL AND STATISTICAL METHODS

CO#	Course Outcome
C01	Skill to choose and apply appropriate numerical methods to obtain appropriate solutions to difficult mathematical problems.
C02	Ability to apply various statistical techniques such as Measures of Central Tendency and Dispersion.
C03	Understanding of relationship between variables using the method of Correlation and Fit Analysis.
C04	Skill to execute programs of various Numerical Methods and Statistical techniques for solving mathematical problems.

SEMESTER - II

DATA STRUCTURES

CO#	Course Outcome
C01	Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms.
C02	Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs.
C03	Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs.
C04	Demonstrate different methods for traversing trees.
C05	Compare alternative implementations of data structures with respect to performance.
C06	Compare and contrast the benefits of dynamic and static data structures implementations.
C07	Describe the concept of recursion, give examples of its use, describe how it can be implemented using a stack.
C08	Discuss the computational efficiency of the principal algorithms for sorting, searching, and hashing.

INTRODUCTION TO PYTHON PROGRAMMING

CO#	Course Outcome
C01	Understand the concepts of python programming.
C02	Students should be able to develop logic for Problem Solving.
C03	Students should be able to apply the problem solving skills using syntactical simple language.
C04	Create new GUI based programming to solve industry standard problems.

DATA BASE MANAGEMENT SYSTEM

CO#	Course Outcome
C01	Gain knowledge of Database and DBMS.
C02	Understand the fundamental concepts of DBMS with special emphasis relational data model.
C03	Demonstrate an understanding of normalization theory and apply knowledge to thenormalization of a database.
C04	Model database using ER Diagrams and design database schemas based on the model.
C05	Create a small database using SQL.
C06	Store, Retrieve data in database.

SEMESTER - III

ACCOUNTING AND FINANCIAL MANAGEMENT

CO#	Course Outcome
C01	Company Setup & Configurations.
C02	Recording Financial Transactions.
C03	Financial Reports Analysis.

OBJECT ORIENTED PROGRAMMING THROUGH JAVA

CO#	Course Outcome
C01	Demonstrate good object-oriented programming skills in Java.
C02	Able to describe, recognize, apply and implement selected design patterns in Java.
C03	Understand the capabilities and limitations of Java.
C04	Be familiar with common errors in Java and its associated libraries.
C05	Develop excellent debugging skills.

OPERATING SYSTEMS

CO#	Course Outcome
C01	Understand the main components and Structure of Operating System & their functions.
C02	Analyze various ways of Process Management & CPU Scheduling Algorithms.
C03	Evaluate various device and resources like Memory, Time and CPU Management techniques in distributed systems.
C04	Apply different methods for Preventing Deadlocks in a Computer System.
C05	Create and build an Application/Service over the UNIX operating system.

SEMESTER - IV

CYBER LAWS

CO#	Course Outcome
C01	Critically evaluate ongoing developments in law relating to information technologies.
C02	Display an understanding of how these developments relate to one another.
C03	Examine areas of doctrinal and political debate surrounding rules and theories.
C04	Evaluate those rules and theories in terms of internal coherence and practical outcomes.
C05	Draw on the analysis and evaluation contained in primary and secondary sources.

DATA MINING AND WARE HOUSING

CO#	Course Outcome
C01	Examine the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system.
C02	Apply preprocessing statistical methods for any given raw data.
C03	Discover interesting patterns from large amounts of data to analyze and extract patterns to solve problems, make predictions of outcomes.
C04	Comprehend the roles that data mining plays in various fields and manipulate different datamining techniques.
C05	Select and apply proper data mining algorithms to build analytical applications.
C06	Evaluate and implement a wide range of emerging and newly-adopted methodologies and technologies to facilitate the knowledge discovery.

WEB PROGRAMMING

CO#	Course Outcome
C01	Use Building Blocks of PHP, Access array elements.
C02	Use various functions and handle data using files.
C03	Use working with Forms, Sessions, Cookies.
C04	Implement JavaScript.

DATA COMMUNICATIONS & NETWORKING

CO#	Course Outcome
C01	Define computer networks, list network configurations, types, topologies, the applications of computer networks in different fields, network models and description of physical layer.
C02	Reason the need for flow and error control at the data link layer and explain the associated protocols.
C03	Enumerate the shared channel access methods, associated protocols and Wireless LAN standards and implementations.
C04	List the types of networking devices / equipments and also explain the addressing scheme used at the network layer.
C05	Explain how network layer, transport layer and application layer facilitates transfer of message from one node to another in a global network.

DATA ANALYTICS USING R

CO#	Course Outcome
C01	Data-Visualization tools and techniques offer executives and other knowledge workers new approaches to dramatically improve their ability to grasp information hiding in their data.
C02	Data visualization is a general term that describes any effort to help people understand the significance of data by placing it in a visual context.
C03	Patterns, trends and correlations that might go undetected in text-based data be exposed and recognized easier with data visualization software.
C04	It isn't just the attraction of the huge range of statistical analyses afforded by R that attracts data people to R. The language has also developed a rich ecosystem of charts, plots and visualizations over the years.
C05	ggplot2 is a data visualization package for the statistical programming language R.

OBJECT ORIENTED SOFTWARE ENGINEERING

CO#	Course Outcome
C01	To describe the three pillars of object-orientation methodologies and explain the benefits of each.
C02	To create use case documents that capture requirements for a software system.
C03	To create class diagrams that model both the domain model and design model softwaresystem.
C04	To create interaction diagrams that models the dynamic aspects of a software system.
C05	To understand the facets of the Unified Process approach to designing and build a softwaresystem.
C06	To build a model for the user interface (UI) of a software application.